foregoing amendment and the following remarks place this
application in condition for allowance or, in the
alternative, in better form for appeal. Entry of this
Amendment is therefore respectfully requested.

§ 103 rejections

Claims 1-4, 7-17, 21-22, 24-27, 30-36, 39, 40 and 42
were rejected under 35 U.S.C. § 103(a) as allegedly being
unpatentable over U.S. Patent No. 5,666,293 to Metz et al.
("Metz-293") in view of U.S. Patent No. 5,978,855 to Metz
et al. ("Metz-855"). Applicants respectfully traverse
this rejection.

The Examiner admitted that Metz-293 does not
specifically disclose a terminal that is informed by a
head-end of a specified in-band channel on which
downloadable data is offered, but asserted that Metz-855
discloses providing instructions to a set-top terminal to
tell the set-top terminal to change to another channel and
receive an application download like the claimed
invention. Applicants respectfully disagree.

Amended independent claims 1, 18, 24 and 36 recite
that the signal identifying a specified in-band channel on
which a download is offered is obtained via an out-of-band
control channel of the cable network. Support for the
out-of-band control channel can be found in the
specification at, for example, page 7, lines 20-28 and
page 8, lines 8-12; one of ordinary skill in the art would
recognize that information broadcast by the headend in the
inventive system is through an out-of-band channel because
the signal will instruct the set-top to tune to a specific
in-band channel to receive the downloadable data.

Neither Metz-293 nor Metz-855 teaches or suggests
offering downloads through an out-of-band control channel.
Metz-293 only teaches storing a network program channel
that will carry operating system software in non-volatile

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memory, but does not mention anything about an out-of-band channel (col. 8, lines 26-31). In addition, as admitted by the Examiner, Metz-293 does not disclose receiving a signal from a headend regarding a specified in-band channel on which a download is available.

Metz-855 also fails to teach or suggest the claimed out-of-band control channel. Instead, Metz-855 teaches that the user selects a video information provider (VIP) and establishes a text session between the set-top terminal and the text server of the VIP choice by selecting a broadcast channel having a related text service. The text server can then instruct the set-top terminal to initiate downloading over the selected broadcast channel (col. 11, lines 11-32). In other words, Metz-855 teaches using an in-band channel both for specifying the channel receiving the download and for the download operation itself. This is not the same as the claimed invention, which uses an out-of-band control channel to conduct the monitoring of downloadable information and a specified in-band channel for receiving the actual download.

Further, it would not have been obvious to incorporate an out-of-band control channel in the Metz-293/Metz-855 combination because Metz-855 assumes that the download indication information and the downloadable data itself will be transmitted via the same, in-band, user-selected channel (col. 11, lines 12-15 and lines 22-27). One of ordinary skill in the art would have focused on improving the manner in which information is transmitted via the in-band channels and would not have incorporated an out-of-band channel like the claimed invention. Thus, neither Metz-293 or Metz-855, either alone or in combination, suggests the claimed invention. Withdrawal of the rejection is therefore respectfully requested.

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Claims 6, 19, 29 and 37 were rejected under 35 U.S.C.
§ 103(a) as allegedly being unpatentable over Metz-293 in
view of Metz-855 and further in view of U.S. Patent No.
5,640,484 to Mankovitz. Applicant respectfully traverses
this rejection. Claims 6, 19, 29 and 37 depend on
patentable independent claims 1, 18, 24 or 36 and are
therefore patentable for the same reasons as the claims
from which they depend. Adding Mankovitz to the Metz-
293/Metz-855 combination still would not suggest the
claimed invention because Mankovitz focuses only on an on-
screen television guide that can search channels when the
television is turned off to avoid interruptions in
television viewing. Nothing in Mankovitz even discusses
checking for the availability of downloadable data.
Claims 6, 19, 29 and 37 are therefore patentable, and
withdrawal of the rejection is respectfully requested.

All objections and rejections having been addressed,
it is respectfully submitted that the present application
is in condition for allowance, and a Notice to that effect
is earnestly solicited.

Any fees associated with the filing of this paper
should be identified in any accompanying transmittal.

However, if any additional fees are required, they may be charged to Deposit Account 18-0013 in the name of Rader, Fishman & Grauer PLLC.

Respectfully submitted,

Dated: _14 February 2001_   By _____
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MARKED-UP VERSION OF CLAIMS

1.   (Twice amended) A set-top terminal for connecting a subscriber to a cable network, said terminal comprising:

a processor; and

a memory unit~~,~~,

~~said terminal being informed by a headend of a specified in-band channel on which a~~ wherein the processor monitors an out-of-band control channel of the cable network for information indicating that a download of data or programming is available and indicating a specified in-band channel for receiving the download of data or programming ~~is~~ offered to said set-top terminal over said cable network, wherein said processor only accepts said download on said specified in-band channel and records said download in said memory unit when one or more predetermined criteria are satisfied, and wherein said criteria when satisfied ~~indicating~~ indicates that acceptance of said download will cause a minimum of interference with said subscriber's use of said set-top terminal.

18.   (Twice amended) A set-top terminal for connecting a subscriber to a cable network, said terminal comprising:

a processor; and

a memory unit~~,~~,

wherein~~, said set-top terminal being informed by a headend of a specified in-band channel on which a~~ the processor monitors an out-of-band control channel of the cable network for information indicating that a download is available and indicating a specified in-band channel for receiving the offered download ~~is offered~~, wherein said terminal occasionally receives said download over

said cable network of new programming on said specified
in-band channel; and

wherein following said download of programming, said
processor will only execute said new programming from
said download when one or more predetermined criteria are
satisfied.

24.   (Twice amended) A method for minimizing
interruptions to use of a set-top terminal that connects
a subscriber to a cable network where said interruptions
result from downloading data or programming to said set-
top terminal over said cable network, the method
comprising the steps of:

receiving a signal from a headend identifying a
specified in-band channel on which said download is
available, wherein the received signal is obtained via an
out-of-band control channel of the cable network; and

accepting said download on said specified in-band
channel only when one or more predetermined criteria are
satisfied, said criteria when satisfied indicating that
acceptance of said download will not interfere with said
subscriber's use of said set-top terminal.

36.   (Twice amended) A method for implementing
upgraded programming received in a set-top terminal for
connecting a subscriber to a cable network, said method
comprising the steps of:

receiving a signal from a headend identifying a
specified in-band channel on which a download of upgraded
programming is offered, wherein the received signal is
obtained via an out-of-band control channel of the cable
network; and

terminating execution of existing programming and
commencing execution of said upgraded programming only
when one or more predetermined criteria are satisfied.